

# 4AG ENGINE TUNING PARTS

## 4AG 16V lightweight high compression piston

(Forged and machined)  
81.5/82.0/82.5/83.0φ

**4AG改**

Price: ¥105,000 (Updated 2026.01.01)



Manufacturing method	Forged and machined
Type	High compression
Piston diameter	φ81.5-83.0
Pin diameter x length	φ20×46mm
Pin height	30.5mm
Piston ring thickness	1.0x1.0x2.0mm
Valve recess diameter	big valve compatible
Valve recess depth	High cam compatible
Pin weight	70g
Piston weight	247-257g

	4AG modified 1606cc	4AG modified 1626cc	4AG modified 1646cc	4AG modified 1666cc
Piston diameter	φ81.5	φ82.0	φ82.5	φ83.0
Recommended gasket inner diameter	φ82.5	φ82.5	φ83.5	φ83.5
Compression ratio (at 0.8mm)	11.75	11.88	11.98	12.12
Compression ratio (at 1.0mm)	11.45	11.58	11.67	11.80
Compression ratio (at 1.2mm)	11.17	11.29	11.38	11.50

\*Calculated based on standard head volume of 36cc, no surface grinding.

4AG Engine Parts

### 4AG Metal Head Gasket (16V)



Bore diameter	Thickness	Price
82.5φ	0.8mm	¥18,000
82.5φ	1.0mm	¥18,000
82.5φ	1.2mm	¥19,000
82.5φ	1.5mm	¥22,000
82.5φ	2.0mm	¥24,000
83.5φ	0.8mm	¥20,000
83.5φ	1.0mm	¥20,000
83.5φ	1.2mm	¥21,000
83.5φ	1.5mm	¥23,000
83.5φ	2.0mm	¥26,000

Bore diameter	Thickness	Price
82.5φ	0.8mm	¥26,000
82.5φ	1.0mm	¥26,000
82.5φ	1.2mm	¥26,000
82.5φ	1.5mm	¥27,000

#### Bead type metal head gasket

This bead-type head gasket secures surface pressure by providing press-formed beads around the combustion chamber and water and oil holes, which require high sealing performance. The layout is appropriately distributed by the width and height of the beads, making it an indispensable part for tuning engines.

#### Stopper type metal head gasket

The stopper type was developed to improve the sealing performance around the combustion chamber. The inner plate is wrapped around the bore in a grommet shape, and the stopper part is overlapped with the outer bead plate, improving the sealing performance with a two-stage structure of the stopper and the bead.

### 4AG reinforced head stud bolt



This is a stud type head bolt designed by ARP, an American company. It has a strength standard of 200,000 PSI, and ensures sufficient tensile strength. In addition, the use of stud bolts reduces the deformation of the cylinder bore caused by tightening the head bolts by half, and stabilizes the piston clearance.

•For 16v ¥28,500  
•For 20v ¥38,000

### 4AG reinforced main stud bolt



This is a stud type main bolt designed by ARP, an American company. Its sufficient tensile strength suppresses crank vibration at high revolutions, enabling 4AG engines to rotate at high speeds. In addition, the use of stud bolts minimizes housing deformation caused by increased tightening force of the main bolts, and reduces the adverse effects on metal clearance.

•16v/20v shared ¥26,000

### 4AG Reinforced flywheel bolts



ARP (USA) Strength standard: 200,000psi  
Tightening torque: 1300 N·m

¥10,500

### 4AG Reinforced connecting rod bolt (9MM)



Made by ARP (USA) - A full-fledged reinforced bolt with torque and elongation control!  
\*Includes molybdenum paste for assembly

•16v/20v shared ¥15,500